

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 February 2005 (17.02.2005)

PCT

(10) International Publication Number
WO 2005/014620 A1

(51) International Patent Classification⁷: **C07K 1/107**,
19/00

(21) International Application Number:
PCT/GB2004/003391

(22) International Filing Date: 5 August 2004 (05.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0318276.3 5 August 2003 (05.08.2003) GB
0320122.5 28 August 2003 (28.08.2003) GB

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LIGATION METHOD

(57) Abstract: A method of ligating two or more molecules, for example, peptides to peptides or peptides to labels is provided. The method may comprise the steps: a) providing a first oligopeptide having a reactive moiety, which is a hydrazine moiety, a hydrazide moiety or an amino- α -oxy moiety b) providing a second oligopeptide having an activated ester moiety, c) allowing the reactive moiety of the first oligopeptide to react with the activated ester moiety of the second oligopeptide to form an oligopeptide product, in which the first and second oligopeptides are linked via a linking moiety having Formula I, II or III. The second oligopeptide may preferably be generated by thiol reagent induced cleavage of an intein fusion protein. The invention further provides labelling and ligation methods in which protein hydrazides are ligated by reaction of the hydrazide moiety with an aldehyde functionality or a ketone functionality.



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